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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/045,138	01/14/2002	Hendrik Frank	A-3246	2344

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EXAMINER

CHAU, MINH H

ART UNIT	PAPER NUMBER
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2854

DATE MAILED: 10/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/045,138

Applicant(s)

FRANK ET AL.

Examiner

Minh H Chau

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Objections

1. **Claims 7-9 and 11-13** are objected to because of the following informalities: There is insufficient antecedent basis for the following recitation:

Claim 7, “said position point” (line 5).

Claims 8 and 9, “said position point” (lines 3-4).

Claim 9, “said first interval” (line 3 and 6).

Claims 11 and 12, “said position coordinate line” (line 3).

Claim 13, “said position coordinate” (line 2 and 4).

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. **Claims 9, 11-15** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 9, the recitation “said position point of said second transmitter” (line 4) and “said position point of said first transmitter” (line 6) is unclear, which creates confusion for the reader. The Examiner is unable to determining the different of the limitation of “said position point of said dimensional standard” as recited in claims 7 and 8 and “said position point of said second transmitter” or “said position point of said first transmitter” as recited in claim 9. What is the connection between the position point of the dimensional standard and the position point of the first or second transmitter?

With respect to claims 11 and 12, the recitation “said position coordinate line” (line 3) is inferentially recited. What is the connection between the “position coordinate line” with the static part or the dimensional standard?

With respect to claim 13, the recitation “said position coordinate” (line 2 and 4) is inferentially recited. It is also noted that the language “said position coordinate of said dimensional standard” is unclear which creates confusion for the reader. The Examiner is unable to determine the relationship between the “position coordinate” and the “dimensional standard”. There is no language in this claim (claim 13) or independent claim (claim 1) that indicates or introduces the relationship between these two features.

3. To the extent that **claims 9 and 11-15** are definite and understandable the following prior art rejections appear to be proper.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claims 1-3, 7-12 and 16-18** are rejected under 35 U.S.C. 102(b) as being anticipated by Kruger et al. (US # 5,809,892).

With respect to claims 1, 16, 17 and 18, Kruger et al. teach printing machine (1) comprising a feeder (8), at least one printing unit (10), a post processing unit (12) and at least

one transport system having a device for registering the position of a pulling device or rotor part (22), the transport system also having a static part (20) in addition to the rotor part, a dimensional standard forming part (44) of the rotor part and a plurality of sensors or transmitters (52) provided on the static part (20) (see Fig. 2 and cols. 5-6 of Kruger et al.)

With respect to claim 2, see Fig. 2 of Kruger et al. that show the plurality of sensor or transmitters (52) are arranged along a position coordinate line of a position coordinate.

With respect to claim 3, see Fig. 2 of Kruger et al. that show respective pairs of the plurality of sensor or transmitters (52) arranged successively along the position coordinate line have at least approximately the same mutual spacing.

With respect to claim 7, see col. 6, lines 36-59 of Kruger et al. that teach at least one of the transmitter (52) serves for generating an output signal on an interval in an environment around the one transmitter as the function or a monotonic function of the position point of the dimensional standard.

With respect to claim 8, see Fig. 5 and cols. 7-8 of Kruger et al. that teach the interval has a given length of the position coordinate of the dimensional standard and when the position point of the dimensional standard is in the interval, at least a first one of the transmitters serves for generating a first output signal, and at least a second one of the transmitters, which follows the first transmitter, serves for generating a second output signal.

With respect to claim 9, see Fig. 5 and cols. 7-8 of Kruger et al. that teach the first transmitter is surrounded by an environment wherein the first interval is located and from which the second transmitter is absent and when the rotor part traveling to the second transmitter, the

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second transmitter is surround by an environment, wherein the first interval is located and from which the first transmitter is absent.

With respect to claim 10, see col. 6, lines 34-59 of Kruger et al. that teach the use sensors (52) for detecting the respective physical position and/or speed of the rotor part (22) and comparing these values with the reference value. In view of this teaching, it is clear to one of skill in the art that the sensors or the transmitters that taught by Kruger et al. at least one reference pulse transmitter and at least one absolute transmitter.

With respect to claim 11, see Fig. 2 of Kruger et al. that show two reference pulse transmitters (52) arranged along the position coordinate line have at least approximately the same mutual spacing.

With respect to claim 12, see Fig. 2 of Kruger et al. that show the spacing between two successive reference pulse transmitters (52), respectively, along the position coordinate line is at most equal to the spacing between two successive transmitters (52).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claim 4** is rejected under 35 U.S.C. 103(a) as being unpatentable over Kruger et al. as applied to claim 1 above.

With respect to claim 4, Kruger et al. plurality of transmitters (52) arranged along the static part and the space between the two successive transmitters is at most equal to one and a half of the length of the dimensional standard having a space between. Kruger et al. teach all the limitations as explained above, except for the spacing between two successive transmitters is at most equal to the length of the dimensional standard. It would have been obvious to one of skill in the art to modify the device of Kruger et al. to have a space between the two successive transmitters is at most equal to the length of the dimensional standard so that the number of transmitters can be reduced, thereby the cost for these transmitters can be reduced.

8. **Claim 5** is rejected under 35 U.S.C. 103(a) as being unpatentable over Kruger et al. as applied to claim 1 above, and in view of Haeberli et al. (US # 6,288,533).

With respect to claim 5, Kruger et al. teach all the limitations as explained above, except for the transmitters are magnetic field detectors.

Haeberli et al. teach an apparatus for detecting rotor position including the use of magnetic field detector (see Fig. 1 and col. 3 of Haeberli et al.)

In view of this teaching, it would have been obvious to one of ordinary skill in the art to modify the device of Kruger et al. to include the magnetic field detector as taught by Haeberli et al. so that the position of the magnetic source can be accurately and properly detected by the magnetic field sensor.

9. **Claim 6** is rejected under 35 U.S.C. 103(a) as being unpatentable over Kruger et al. as applied to claim 1 above, and in view of Holzapfel et al. (DE 19748802).

With respect to claim 6, Kruger et al. teach all the limitations as explained above, except for the “transmitters are optical detectors ... incident light”.

Holzapfel et al. teach an optical position-measuring device for determining the position of the moving objects including optical detector unit (25) for detecting the light source (21) that reflected from the pattern surface of the moving object (see Fig. 1 of Holzapfel et al.)

In view of this teaching, it would have been obvious to one of ordinary skill in the art to substitute the sensor system of Kruger et al. with the optical measuring system as taught by Holzapfel et al. Such substitution would involves an obvious substitute of one know sensor system for another known sensor system.

10. Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kruger et al. ('892) as applied to claim 1 above, and in view of Kruger et al. (US # 6,240,843).

With respect to claim 13, Kruger et al. ('892) teach all the limitations as explained above, except for the limitation of “a first position point ... dimensional standard”.

Kruger et al. ('843) teach sheet transport system for a rotary printing press comprising a position-registering device including a first position point of the position coordinate of the dimensional standard (10a) coincides with a second position point of the position coordinate of the dimensional standard (10a) (see Fig. 4 that show the closed loop or path of the transport device 4).

In view of this teaching, it would have been obvious to one of ordinary skill in the art to modify the device of Kruger et al. ('892) to include the a first position point of the position coordinate of the dimensional standard coincides with a second position point of the position

coordinate of the dimensional standard as taught by Kruger et al. ('843) to allow the position of the rotor part transport in the closed loop path can be properly detected.

With respect to claims 14 and 15, see Fig. 2 of Kruger et al. that show two successive transmitters or two successive reference transmitters, respectively, a transmitters or reference transmitters with a minimum index and a transmitters or reference transmitters with a maximum index having at least approximately the same mutual spacing.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Applicant's attention is invited to the patent to Andoh (US # 5,130,583) and Schmid et al. (US # 6,532,791).

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh H Chau whose telephone number is (703) 305-0298. The examiner can normally be reached on M - TH.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew H Hirshfeld can be reached on (703) 305-6619. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

MHC
September 21, 2003

